

Claims

1. Rotating bed (1) that can be converted from a normal bed or sleeping position into a chair position,
with a base (2) that can be placed on a floor and selectively adjusted with respect to its vertical position, wherein said base defines a floor coverage area when it is positioned on the floor,
with a rotary joint (3) that is arranged on the base (2) and has a vertical axis of rotation,
with a mattress frame arrangement (4) that is composed of at least three mattress frame sections (5, 6, 8), wherein the central mattress frame section (5) is connected to the base (2) by means of the rotary joint (3),
wherein the two other mattress frame sections (6, 8) are hinged to the central mattress frame section (5) such that they can be pivoted relative to the central mattress frame section (5) about horizontal axes in order to be displaced into the chair position, and
with at least one additional support leg (30) that projects from the floor coverage area, namely in a direction that lies essentially perpendicular to the longitudinal direction of the rotating bed (1) relative to the normal bed or sleeping position.

2. Rotating bed according to Claim 1, characterized by the fact that the base (2) stands on the floor at four contact points when it is in use, with the contact points defining the corners of the at least approximately rectangular floor coverage area.

3. Rotating bed according to Claim 1, characterized by the fact that the base (2) has four stationary legs (63) that form the contact points.

4. Rotating bed according to Claim 1, characterized by the fact that the base (2) has four wheels (14) that are rotatable relative to a horizontal axis and form the contact points.

5. Rotating bed according to Claim 4, characterized by the fact that the wheels (14) can also be turned relative to the base (2) about a vertical axis.

6. Rotating bed according to Claim 4, characterized by the fact that the wheels (14) are supported by means of a fork (15) such that they are rotatable relative to a

horizontal axis, and by the fact that the fork (15) is connected to the base (2) such that it is rotatable relative to a vertical axis.

7. Rotating bed according to Claim 4, characterized by the fact that at least one of the wheels (14) has a brake that can be selectively engaged or disengaged.

8. Rotating bed according to Claim 1, characterized by the fact that the mattress frame arrangement (4) comprises motors for adjusting the two mattress frame sections (6, 8) relative to the central mattress frame section (5).

9. Rotating bed according to Claim 1, characterized by the fact that the support leg (30) is provided with a plate (56) on its projecting end, said plate being aligned parallel to the floor in the supporting position of the support leg (30).

10. Rotating bed according to Claim 1, characterized by the fact that the support leg (30) is provided with a roller (45) on its projecting end, said roller being rotatable about an axis that extends parallel to the floor.

11. Rotating bed according to Claim 1, characterized by the fact that the additional support leg (30) is rigidly arranged on the base (2).

12. Rotating bed according to Claim 1, characterized by the fact that the additional support leg (30) is movably connected to the base (2), such that the support leg (30) can be moved from a supporting position in which it projects beyond the edges of the floor coverage area into a parking position in which it is essentially retracted from the structure clearance of the mattress frame (4) in the sleeping position.

13. Rotating bed according to Claim 12, characterized by the fact that the support leg (30) can be moved from a lowered position in which it is positioned in the immediate vicinity of the floor into a raised position in which it is spaced apart from the floor by a greater distance.

14. Rotating bed according to Claim 12, characterized by the fact that the support leg (30) has an articulation (31, 47) that is situated at a distant point of the support leg (30) relative to the projecting end.

15. Rotating bed according to Claim 14, characterized by the fact that the articulation (31) is realized in such a way that the support leg (30) moves along a path

with at least one component that is at least for a certain distance aligned transverse to the longitudinal direction of the bed relative to the sleeping position.

16. Rotating bed according to Claim 14, characterized by the fact that the articulation (31, 47) is provided at one end of the support leg (30).

17. Rotating bed according to Claim 14, characterized by the fact that the articulation (31, 47) has at least one axis.

18. Rotating bed according to Claim 17, characterized by the fact that the at least one axis is a translatory axis or a rotatory axis.

19. Rotating bed according to Claim 14, characterized by the fact that the articulation (31) is realized in such a way that the support leg (30) can be pivoted about a horizontally aligned axis.

20. Rotating bed according to Claim 14, characterized by the fact that the articulation (31) comprises two parallel toothed racks (35) that are spaced apart from one another and mounted on the base (2), as well as two pinion gears (36) that mesh with the toothed racks (35) and are rigidly connected by means of a shaft (37) on which the support leg (30) is supported in a pivotable fashion.

21. Rotating bed according to Claim 20, characterized by the fact that the retracted position of the support leg (30) is defined by a limit stop (44) that is effective outside a plane in which the driving motor (42) for moving the support leg (30) engages, such that the support leg (30) is automatically pivoted upward when it comes in contact with the limit stop (44).

22. Rotating bed according to Claim 1, characterized by the fact that two support legs are provided and are coupled to one another.

23. Rotating bed according to Claims 1-14, characterized by the fact that a common articulation (31) is provided for both support legs (30).

24. Rotating bed according to Claims 21 and 23, characterized by the fact that the two support legs (30) are arranged between the two toothed racks (35) and supported on the common shaft (37) that serves to connect the two pinion gears (36) that mesh with the toothed racks (35).

25. Rotating bed according to Claim 14, characterized by the fact that the articulation (47) has only one pivoting axis that lies in a vertical plane.

26. Rotating bed according to Claim 25, characterized by the fact that the pivot axis is inclined in the vertical plane such that it points outward above the rotating bed (1) relative to the rotating bed (1).

27. Rotating bed according to Claim 14, characterized by the fact that the support leg (30) is aligned parallel to the longitudinal axis of the rotating bed (1) in its parking position.

28. Rotating bed according to Claim 1, characterized by the fact that the base (1) has at least one longitudinal edge (13) that is spaced apart from the floor at least in a central region relative to the longitudinal direction of the rotating bed (1) in the normal bed or sleeping position.

29. Rotating bed according to Claim 28, characterized by the fact that the support leg (30) can be moved backward and forward in the gap between the edge (13) and the floor.

30. Rotating bed according to Claim 29, characterized by the fact that the longitudinal edge (13) that is spaced apart from the floor forms an abutment for the support leg (30) in its supporting position.

31. Rotating bed according to Claim 29, characterized by the fact that a roller for the support leg (30) is rotatably supported on the longitudinal edge (13) of the base (2), wherein said roller is aligned with the support leg (30) when it is situated in its supporting position.

Abstract

A rotating bed has a base, on which a mattress frame that is divided into sections can be rotated about a vertical axis. The mattress frame can be converted into a chair-like configuration in one rotational position. In order to increase the stability of the arrangement in the chair position, at least one support leg is provided that either contacts

the floor from the beginning or only makes contact with the floor when the stability limit without the support leg is exceeded.

Figure 1